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U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE SUBCOMMITTEE ON
ENVIRONMENT AND HAZARDOUS MATERIALS
COMMITTEE ON ENERGY AND COMMERCE
U.S. HOUSE OF REPRESENTATIVES

March 5, 2003

Good afternoon Mr. Chairman and Members of the Subcommittee. I am Cliff Rothenstein, EPA's Director of the Office of Underground Storage Tanks. I am pleased to appear today to discuss some of the challenges facing the Underground Storage Tank program and describe the work EPA has undertaken to address those challenges.

Background

In 1984, Congress responded to the increasing threat to groundwater posed by leaking underground storage tanks (USTs) by adding a new subtitle to the Resource Conservation and Recovery Act (RCRA). Subtitle I directed EPA to develop a comprehensive regulatory program for USTs storing petroleum or certain hazardous substances to protect the environment and human health from UST releases. EPA's 1988 regulations set minimum standards for new tanks and required owners of substandard tanks to either upgrade or close them. The regulations addressed a variety of other requirements including those related to leak detection and the cleanup of tank releases.

In 1986, Congress created the Leaking Underground Storage Tank (LUST) Trust Fund to provide a funding source for the UST cleanup program. The LUST Trust Fund provides funding for EPA to help administer the nationwide LUST program and implement the program in Indian Country. In 1998, Congress also created explicit authority for EPA to provide LUST funding for Federally recognized Indian Tribes. The majority of LUST Trust Fund monies are provided to states by EPA to oversee cleanups, take enforcement actions at leaking tank sites, and undertake state-lead cleanups when a party responsible for the leaks cannot be found or is unwilling or unable to clean up the site. EPA provides approximately 81 percent of the annual LUST Trust Fund congressional appropriation to states.

Since its inception in the mid-1980's, the EPA UST program has developed an effective partnership with states to implement the program. From the outset, the program was designed to be implemented primarily by the states. In general, all states implement an underground storage tank program using grants and cooperative agreements from EPA. Thirty two states, the District of Columbia, and Puerto Rico, have been formally approved by EPA to operate their own UST programs

in lieu of the Federal UST program. EPA retains the authority to implement and enforce a state's UST program in authorized states and to implement and enforce the Federal program in unauthorized states. EPA continues to work with unapproved states to help them improve their programs so that they are eligible for EPA approval.

Program Progress

At the inception of the UST program, there were more than 2 million regulated tanks. Many of them were old steel tanks suffering from corrosion. To date, more than 1.5 million substandard tanks have been closed. Currently, there are approximately 698,000 active USTs, nearly all of which now have required leak detection and prevention equipment. Further, states report that approximately 70 percent of these USTs are being operated and maintained correctly.

EPA and the States have made substantial progress in cleaning up releases from leaking USTs. Since the inception of the program, approximately 427,000 petroleum releases have been reported from USTs. Of these, 384,000 have had cleanup started and cleanup has been completed for 285,000 of these releases. In other words, cleanup has been started at 90 percent of release sites and completed at 67 percent. Considerable progress has also been made in reducing the number of new releases. Since 1990, reported releases averaged approximately 30,000 per year. By fiscal year 2002, the number of reported UST releases had dropped to 8,400.

Program Challenges

Although the UST program has made substantial progress, there are additional challenges that need to be addressed. There are still approximately 140,000 reported releases that have not had cleanup completed and there are hundreds of thousands of abandoned USTs that need to be addressed. Further, roughly 30 percent of active USTs do not comply with leak prevention and prevention requirements. Finally, releases are being reported from new and upgraded systems.

The vast majority of regulated USTs contain petroleum products that include toxic substances such as benzene, toluene, and naphthalene. UST releases therefore can pose a threat to human health and the environment. Further complicating the cleanup of UST releases is the presence of methyl tertiary-butyl ether (MTBE). Communities across the country are finding MTBE contamination in their groundwater. For example, the city of Santa Monica, California has lost a significant portion of its drinking water supply due to MTBE contamination caused by leaking USTs and in Long Island, New York, MTBE contamination has affected more than 160 private and public wells and threatens Long Island's sole source aquifer.

More than 140,000 confirmed releases must still be cleaned up, and more releases are reported every year. In addition to addressing these known and future releases there are abandoned USTs that must be found, removed and cleaned up. The General Accounting Office (GAO) has estimated that there is petroleum contamination at approximately 200,000 brownfield sites. The UST program not

only needs to clean up releases, but must also focus on prevention. EPA believes that preventing releases before they occur will help provide efficient and effective protection of human health and the environment.

GAO has also reported that approximately 29 percent of USTs were not operated or maintained properly, finding particular problems with leak detection systems and anti-corrosion equipment. While most USTs have equipment that complies with program requirements, proper operation and maintenance remains a problem. Owners and operators of USTs often have many responsibilities in their place of business that compete with the time needed to properly operate and maintain UST systems. Additional compliance assistance, operation and maintenance training, system inspections, and enforcement are needed to improve the operation and maintenance of UST systems.

Finally, new and upgraded UST systems are being found to leak. State data indicates that approximately 2 percent of facilities have leaks in new or upgraded tanks. The challenge to the UST program is to determine the cause of current problems, identify which problems warrant further action, and develop appropriate measures to address them.

Program Initiatives

EPA has undertaken four initiatives to address the challenges facing the UST program: (1) faster cleanups, (2) USTfields for abandoned tanks, (3) improving compliance, and (4) evaluating UST system performance.

Working with EPA regions and states, the UST program has developed cleanup goals to promote faster cleanups. EPA has also created a web-based tool box for promoting pay-for-performance contracting methods, which in many cases has shortened cleanup times and reduced cleanup costs by 30 to 50 percent. In addition, EPA is encouraging the development of voluntary multi-site cleanup agreements between state or Regional EPA programs and private, Federal, or Tribal owners of multi-site leaking USTs. Developing multi-site agreements should produce program economies of scale that will allow faster cleanups. Finally, EPA is partnering with the State of New York on a project to optimize the performance of remedial systems at LUST sites.

EPA's USTfields initiative targets funding for properties contaminated with petroleum products from abandoned USTs that had not been eligible for funding through the Agency's Brownfields program. In November 2000, EPA announced its first ten USTfields pilot grants, and its next 40 in August 2001. The report *Recycling America's Gas Stations*, released last year, describes the progress of the first 10 pilots. In January 2002, President Bush signed the Small Business Liability Relief and Brownfields Revitalization Act into law. The Act authorizes significant new funding for the cleanup of petroleum contaminated properties. The USTfields pilots will provide valuable lessons learned as we continue to address abandoned petroleum contaminated properties. EPA received over 1200 applications for this year's competition and will award the first grants under the new law this summer.

EPA is committed to improving compliance with UST program requirements. Working with State and Tribal partners, EPA is focusing on the need for improved operation and maintenance and improving the quality of compliance data. Improved compliance data will reveal the percentage of facilities properly monitoring their systems, rather than simply having the proper equipment in place. EPA is also looking at a number of new approaches to improve compliance including third-party inspections and the use of environmental results programs such as the one used by the State of Massachusetts for several commercial sectors. These alternative approaches to inspections require UST owners and operators to confirm and certify that their leak prevention and detection equipment is being operated and maintained properly. Finally, the training of both state inspectors and owners and operators is a continued need. EPA is working with its state partners to identify the best approaches to increase training opportunities, including greater use of universities and internet-based interactive training.

EPA is also focusing on the evaluation of UST system performance to help determine the sources and causes of releases, as well as the reasons for leak detection failures. The Agency is working with various states to evaluate the performance of UST systems, including partnering with 24 states to perform leak analysis at new release sites to determine the source and cause of the release. In addition, EPA gathered and analyzed more than 50 reports or studies generated by states and the private sector and met with numerous state program and industry experts to identify the strengths and weaknesses of current UST systems.

The evaluation of UST system performance has found that there continue to be faults in UST systems including the design, installation, operation, and maintenance of various components. Many of the problems appear to be caused by human error or lack of oversight, such as failure to test and maintain corrosion protection and leak detection systems. UST system piping has been identified as a major concern, as have spills and overflows during product delivery and releases from dispensers. Release detection is not always reliable and is reactive by design, not registering the leak until it has entered the environment, unless there is a secondary containment system with interstitial monitoring, which 21 states now require. Finally, there is emerging evidence that vapors are escaping from new and upgraded UST systems, which can contaminate groundwater.

In addition, EPA has undertaken several efforts to assist states in addressing MTBE contamination. EPA has provided funding and technical support to several communities, including Santa Monica, California; South Lake Tahoe, California; Long Island, New York; Pascoag, Rhode Island; and Hopkins, South Carolina. Further, EPA now maintains a website that documents MTBE cleanup case studies to provide states a nationwide cleanup resource. Finally, EPA is conducting a demonstration of cleanup technologies for MTBE contaminated soils, groundwater, and drinking water at Port Hueneme, California and in Pascoag, Rhode Island.

Conclusion

Significant progress has been made on a number of UST program challenges including the closure of substandard tanks, upgrading equipment, improving compliance, and cleaning up releases. However, a great deal of work remains to complete UST cleanups and reduce future releases through improved UST system operation, maintenance and training. We look forward to working with Congress to address these remaining challenges.